

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
William A. Hinton State Laboratory Institute
305 South Street, Jamaica Plain, MA 02130

DEVAL L. PATRICK
GOVERNOR

TIMOTHY P. MURRAY
LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD
SECRETARY

JOHN AUERBACH
COMMISSIONER

12/21/2011

Tavares Brewington
United States Assistant District Attorney, Boston, MA

Dear USADA Brewington,

Enclosed is the information you requested in regards to US vs. [REDACTED] Included are copies of the following:

1. Curriculum Vitae for Annie Dookhan and Della Saunders.
2. Drug Analysis Laboratory Receipt.
3. Control Cards with analytical results for samples # [REDACTED]
4. Analysis sheets with custodial chemist's hand notations and test results.
5. Infra-Red Spectral analytical data for sample [REDACTED]
6. GC/Mass Spectral analytical data for samples # [REDACTED]

Della Saunders was the custodial chemist and performed the preliminary testing and net weight for this sample. Annie Dookhan was the confirmatory chemist and analyzed the GC/MS data for this sample.

If you have any questions about these materials, please call me at the number below.

Sincerely,

Annie Dookhan
Chemist
Drug Analysis Lab
Jamaica Plain, MA. 02130
(617) 983-6622

Curriculum Vitae

Annie Khan (Dookhan)

Education:

University of Massachusetts, Boston, Ma, Master of Science in Chemistry.

University of Massachusetts, Boston, Ma, Bachelor of Science in Biochemistry.

Experience:

2003 – present

Chemist I, II, Massachusetts Department of Public Health, Drug Analysis Laboratory

- *Responsible for the identification of illicit drugs to determine violations of harmful and narcotic drug laws.

- *Writing, revising and reviewing Standard Operating Procedures (SOPs) and Protocols.

- *Responsible for the Quality Control of all analytical instruments, reagents and controls/standards.

- *Oversee the Quality Control/Quality Assurance program for the Drug Lab.

- *Maintenance and repairs of all analytical instruments.

- *Trained in the use of complex analytical instrumentation, microscopes and balances for the purpose of drug analysis.

- *Qualified as an expert witness in Massachusetts Courts and U.S. District Court.

- *Completed six-week training course conducted by senior staff within the Department of Public Health, Drug Analysis Laboratory.

- *Appointed Assistant Analyst by Assistant Commissioner of Public Health, 2004.

- *Notary Public.

2001 – 2003

QC Analyst I, II, UMMS-Massachusetts Biologic Laboratory, QC Material Control

- *Completed proficiency training conducted by a member of the staff within the MLB Quality Control and Quality Assurance Department for the Food and Drug Administration.

- *Method Development for creating new techniques and enhancing vaccines for the QC Dept. and FDA.

- *Writing, revising and reviewing Standard Operating Procedures (SOPs).

- *Trained and supervised new chemists and interns for the department.

- *Routine QC testing of products for the FDA.

- *Trained in the use of complex analytical instrumentation, and balances for the purpose of QC analysis for product and validation projects.

- *Calibration, preventive maintenance, QC and QA of analytical instrumentation.

- *Complete testing of chemicals for Vendor Validation Project for the FDA.

- *Compendial testing and interpretation of the USP, ACS, FCC, AOAC, Merck Index, PDR, etc.

Additional Training:

Dept. of Justice – Forensics Professionals. (numerous trainings)

GLP/GMP training with Massachusetts Biologic Laboratory.

QC/QA training according to FDA Codes and Regulations.

GC and GC/MS trainings with Agilent Technologies and Restek.

HPLC and LC/MS/MS trainings with Waters Cooperation.

FTIR training with Spectros.

TOC training with MBL and Sievers.

Association:

American Chemical Society (ACS)

Northeastern Association of Forensics Science (NEAFS)

Curriculum Vitae

Della Saunders

Education:

Boston University Boston, MA. Bachelors of Arts in Chemistry 1982

Experience:

1985-present: Currently Chemist III Massachusetts Department of Public Health Drug Analysis Laboratory at State Laboratory Institute Boston, MA. Responsible for analyzing unknown substances submitted by Massachusetts law enforcement agencies; operating, maintaining, and interpreting data from analytical equipment (analytical balance, microscope, gas chromatogram, ultraviolet spectrometer, infrared spectrometer, gas chromatogram/mass spectrometer); training junior level chemists; providing expert testimony to local, state, and federal courts in the Commonwealth of Massachusetts.

1984-1985: Laboratory Technician in the Media Laboratory at State Laboratory Institute Boston, MA. Responsible for making chemical reagents and media plates; operating and maintaining laboratory equipment (autoclave, pH meter, ultra-violet hood), and collecting safety data for laboratory protocols.

Training:

1985: Six week training with Senior Staff at Massachusetts Department of Public Health (MDPH) Drug Analysis Laboratory Boston, MA. Appointed Assistant Analyst MDPH

1987: One week training course in drug analysis given by the Federal Drug Enforcement Agency (DEA) McLean, VA.

1992: Training in Gas Chromatograph/Mass Spectroscopy (GC/MS) Hewlett Packard (Agilent)

1996: Training in Fourier Transform Infra-Red Spectroscopy ETA (Analect)

2001: Expert Witness Workshop National Laboratory Training network Quality Assurance/Quality Control Training (MDPH)

2002: Techniques of Supervision Training (MDPH)

1999: Notary Public Commonwealth of Massachusetts

PLEASE PRINT CLEARLY OR TYPE ALL INFORMATION

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health
State Laboratory Institute

Boston Drug Laboratory
Tel (617) 983-6622
Fax (617) 983-6625

Boston Hours

8:00 - 11:00
2:00 - 4:00

Amherst Drug Laboratory
Tel (413) 545-2601
Fax (413) 545-2608

Amherst Hours

9:00 - 12:00
1:00 - 3:00

DRUG RECEIPT

City or Department: Brockton Police Department Police Reference No.: [REDACTED]

Name and Rank of Submitting Officer: DONOHUE, PATRICK S 380 DOC # R011934

Defendant(s) Name (last,first,initial):
[REDACTED]

To be completed by Submitter
Description of Items Submitted

To be completed by Lab Personnel
Gross Weight Lab Number

1) PLASTIC BAGS UNK WHITE ROCK (QTY: 2) PLASTIC BAG UNK WHITE ROCK (S17121) 8PB	10.72g	[REDACTED]

Received By: AS

Date: 7.2.09

No. [REDACTED]

Date Analyzed: 10-02-09

City: Brockton Police Dept.

Officer: Detective PATRICK DONOHUE

Def: [REDACTED]

Amount:

Subst: SUB

No. Cont: 2 Cont: pb

Date Rec'd: 07/02/2009

No. Analyzed:

Gross Wt.: 10.72

Net Weight: 6.35g

Tests: 14 ASD

• 4 ASD

(K) Prelim: COCAINE

Findings: cocaine
Base

DRUG POWDER ANALYSIS FORM

SAMPLE #



AGENCY

Brockton

ANALYST

JSF

No. of samples tested: 2

Balance OK 10/1/09
Mettler 1117461624

Evidence Wt.

10.4188g

PHYSICAL DESCRIPTION:

Off-white chunky substance contained in
two (2) clear plastic bags contained in one
clear sealed plastic bag initialed

Gross Wt (): _____

Gross Wt (): 6.7920g

Pkg. Wt: 0.3393g

Net Wt: 6.3827g

PRELIMINARY TESTS

2 Spot Tests

Cobalt
Thiocyanate (H+) +

Marquis —

Froehde's —

Mecke's —

2 Microcrystalline Tests

Gold
Chloride +

TLTA (H+) +

OTHER TESTS

2 IPT

PRELIMINARY TEST RESULTS

RESULTS cocaine

DATE 10/1/09

GC/MS CONFIRMATORY TEST

RESULTS cocaine (base)

MS
OPERATOR ASD

DATE 10/2/09

Sample #:



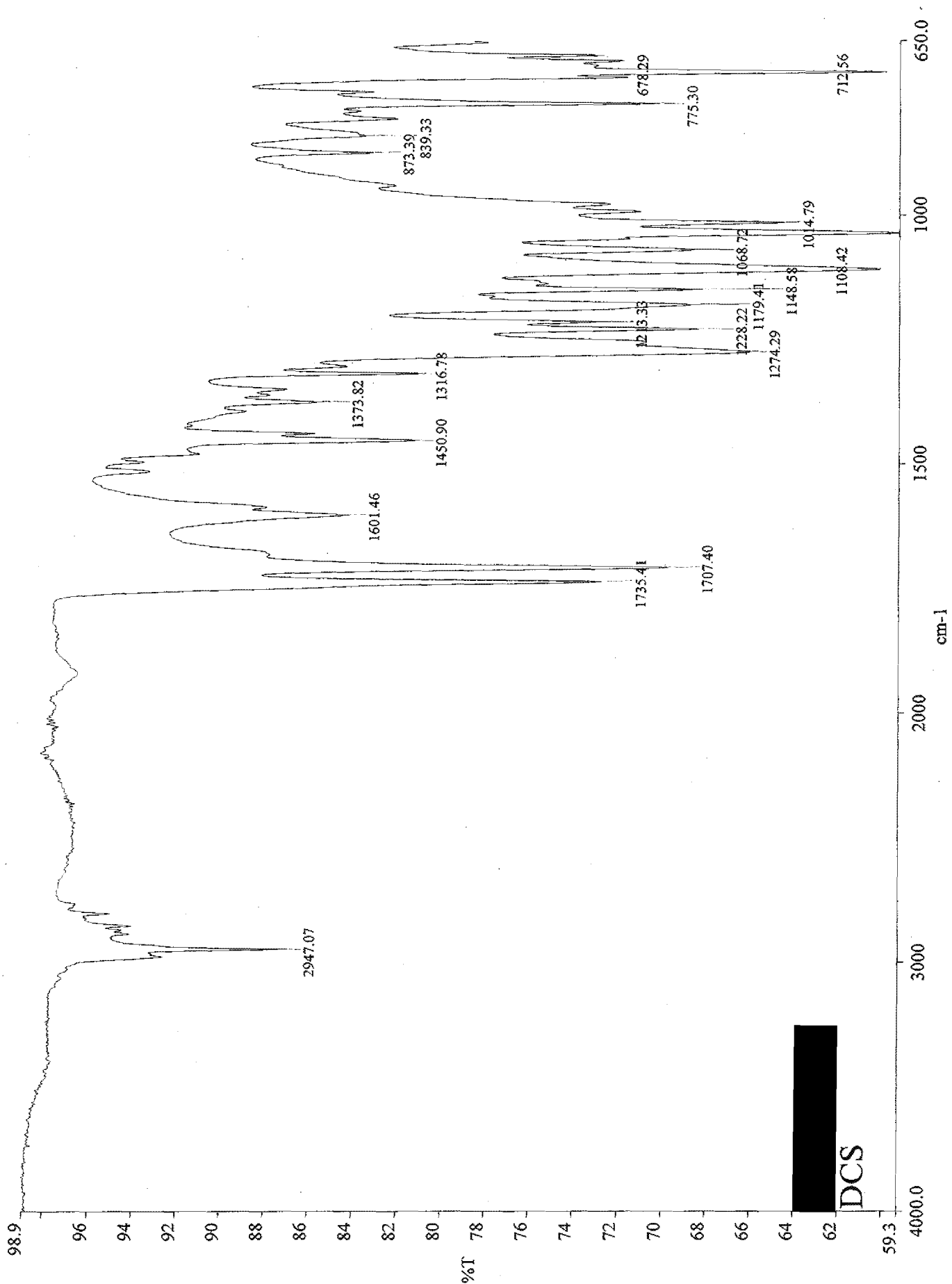
2 extra plus 3.0349g

samples tested: 2

#	Gross Weight	Packet Weight	Net Weight	#	Gross Weight	Packet Weight	Net Weight
1	3.3911g	0.1154g	3.2761g	26			
2	3.3309g	0.2243g	3.1066g	27			
3				28			
4				29			
5				30			
6				31			
7				32			
8				33			
9				34			
10				35			
11				36			
12				37			
13				38			
14				39			
15				40			
16				41			
17				42			
18				43			
19				44			
20				45			
21				46			
22				47			
23				48			
24				49			
25				50			

Calculations:

Gross wt Packet wt Net wt
 totals 6.7220g - 0.3393g = 6.3827g



DCS
c:\pel_data\spectra\ [redacted] .sp

Unknown: C:\pel_data\spectra\

Library: C:\pel_data\libs\DL.idx

Euclidean Hit List:

0.844 DL1744 COCAINE (SYNTHESIZED CRACK)

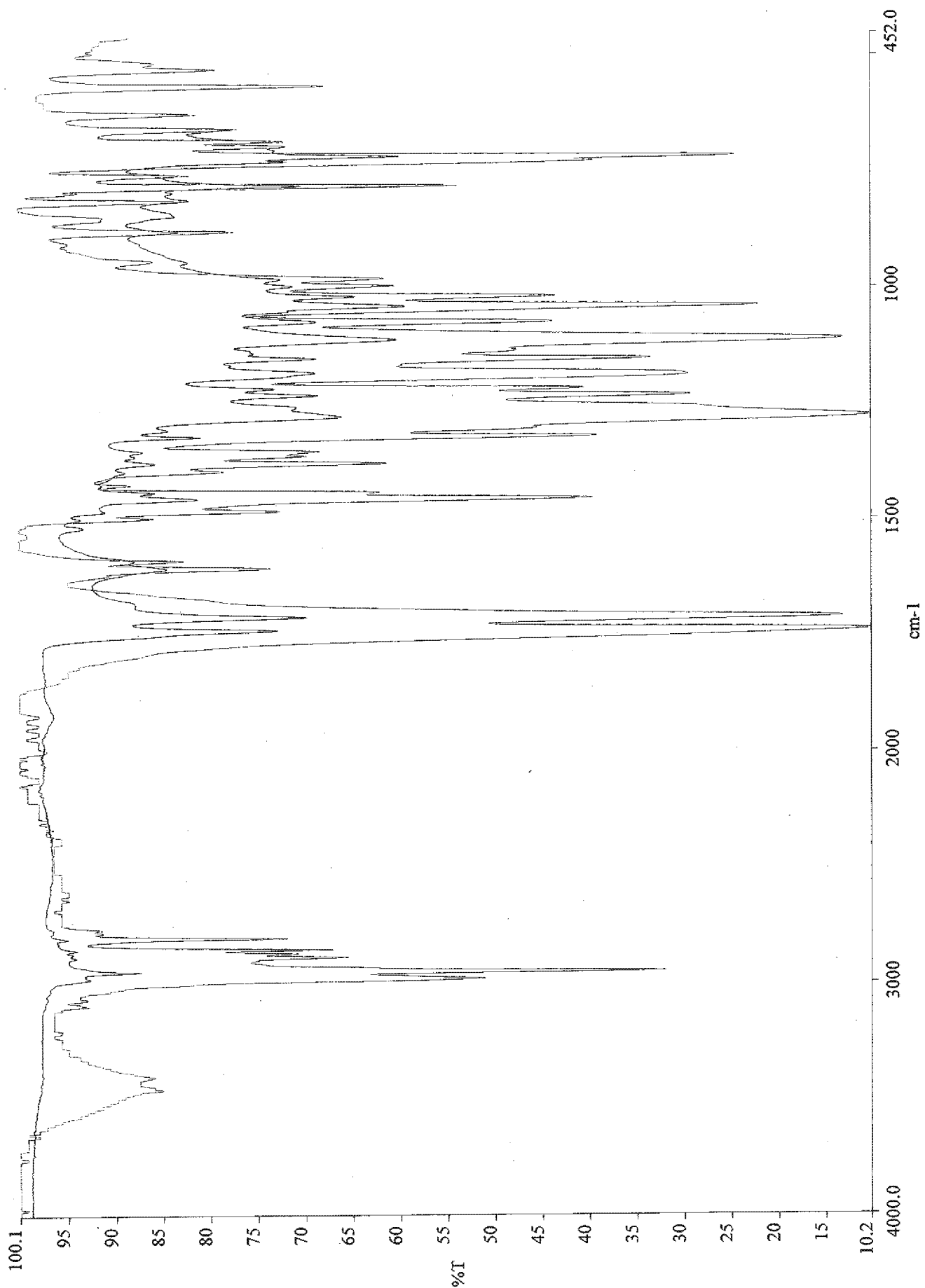
0.823 DL0178 COCAINE IN KBr

0.601 DL0209 COCAINE HCl IN KBr (MERCK)-SAMPLE CONTAINS WATER-METHANOL MIXTURE

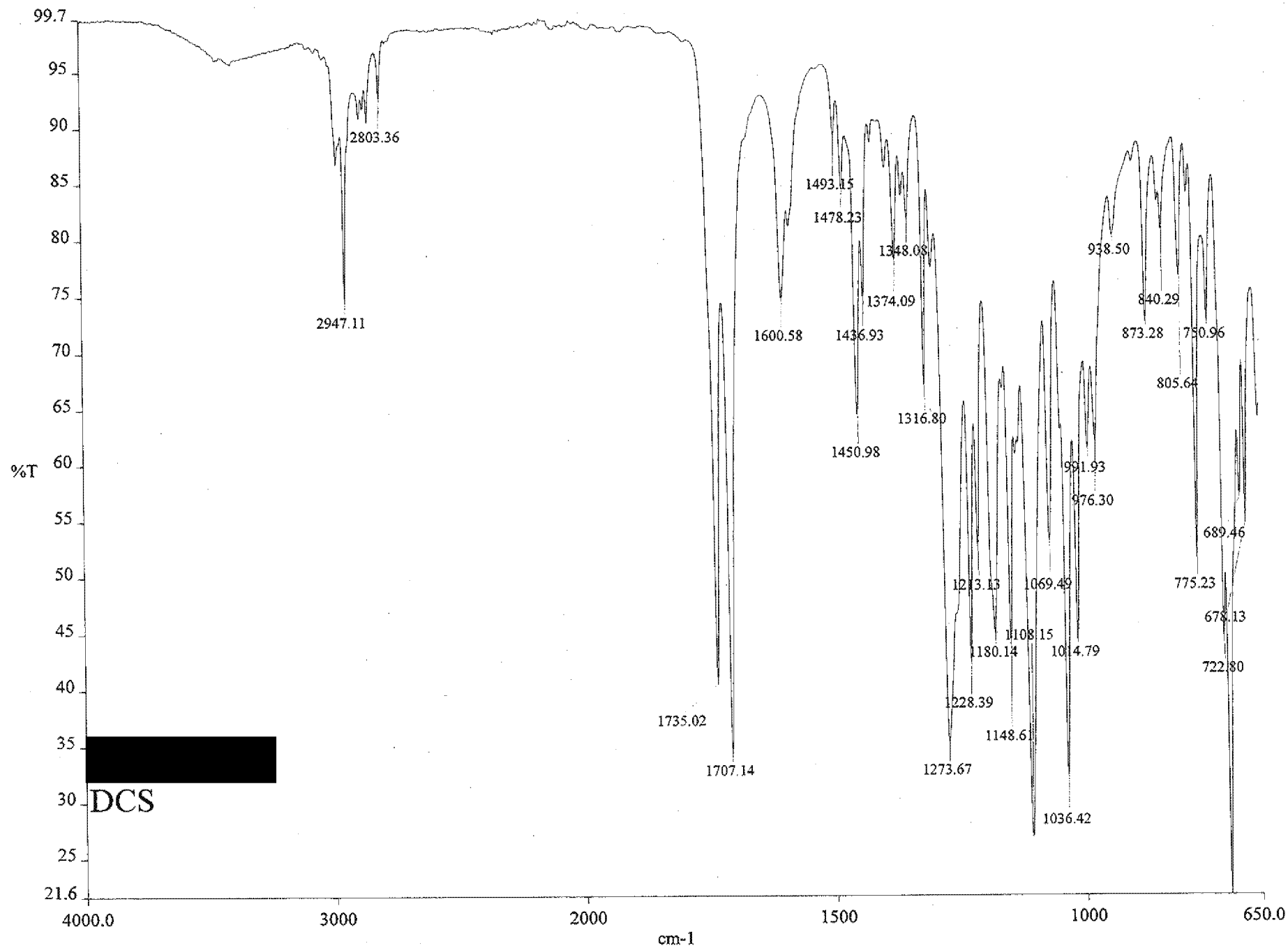
Selected Range: 4000.00 - 652.00 cm⁻¹

No Blank Regions:

The Georgia State Crime Laboratory



c:\pel_data\spectra\ [REDACTED]
dl1744.sp - DL1744 COCAINE (SYNTHESIZED CRACK)



c:\pel_data\spectra\ [redacted]

Unknown: C:\pel_data\spectra\

Library: C:\pel_data\libs\DL.idx

Euclidean Hit List:

0.877 DL1744 COCAINE (SYNTHESIZED CRACK)

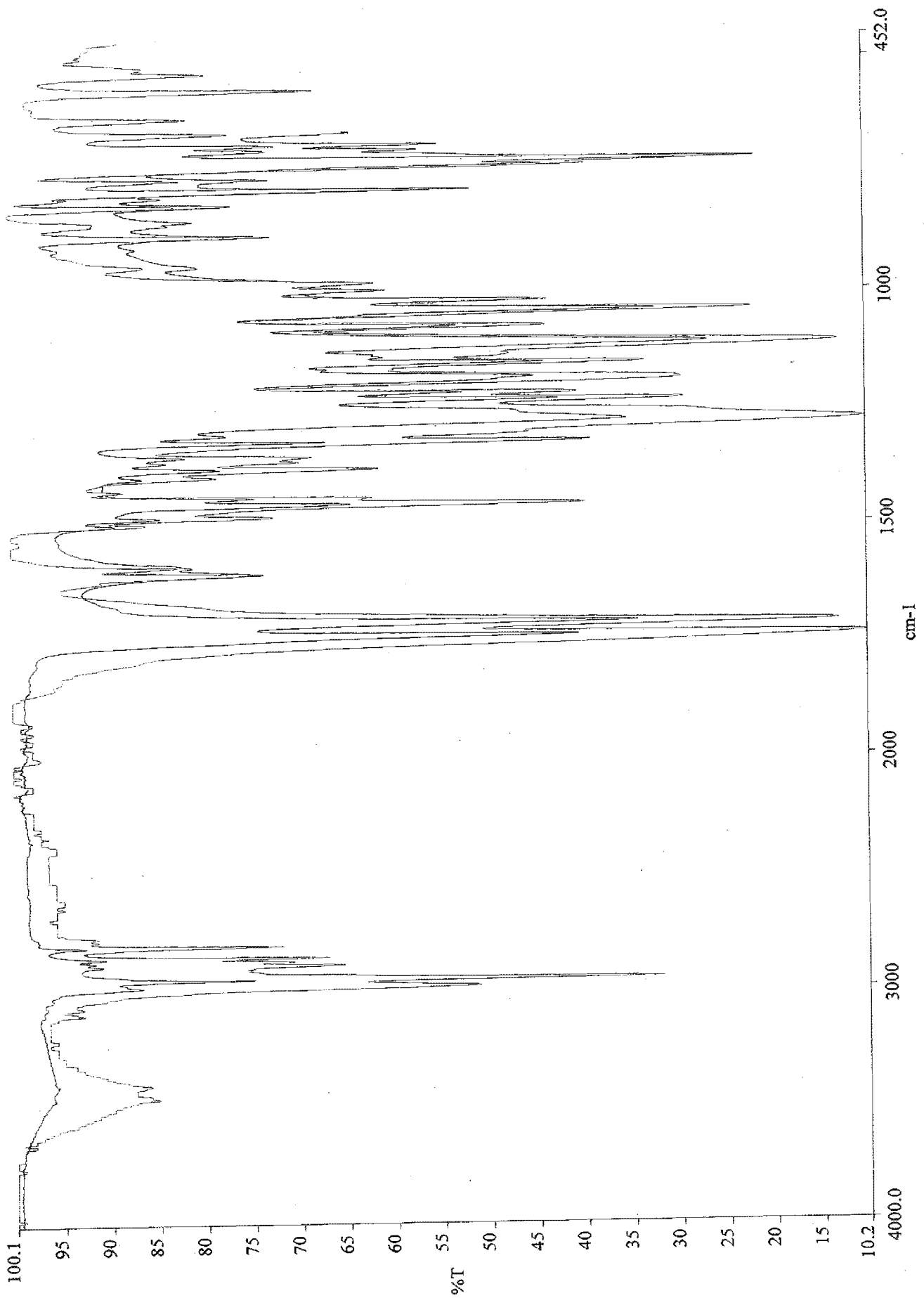
0.847 DL0178 COCAINE IN KBr

0.655 DL0209 COCAINE HCl IN KBr (MERCK)-SAMPLE CONTAINS WATER-METHANOL MIXTURE

Selected Range: 4000.00 - 652.00 cm⁻¹

No Blank Regions:

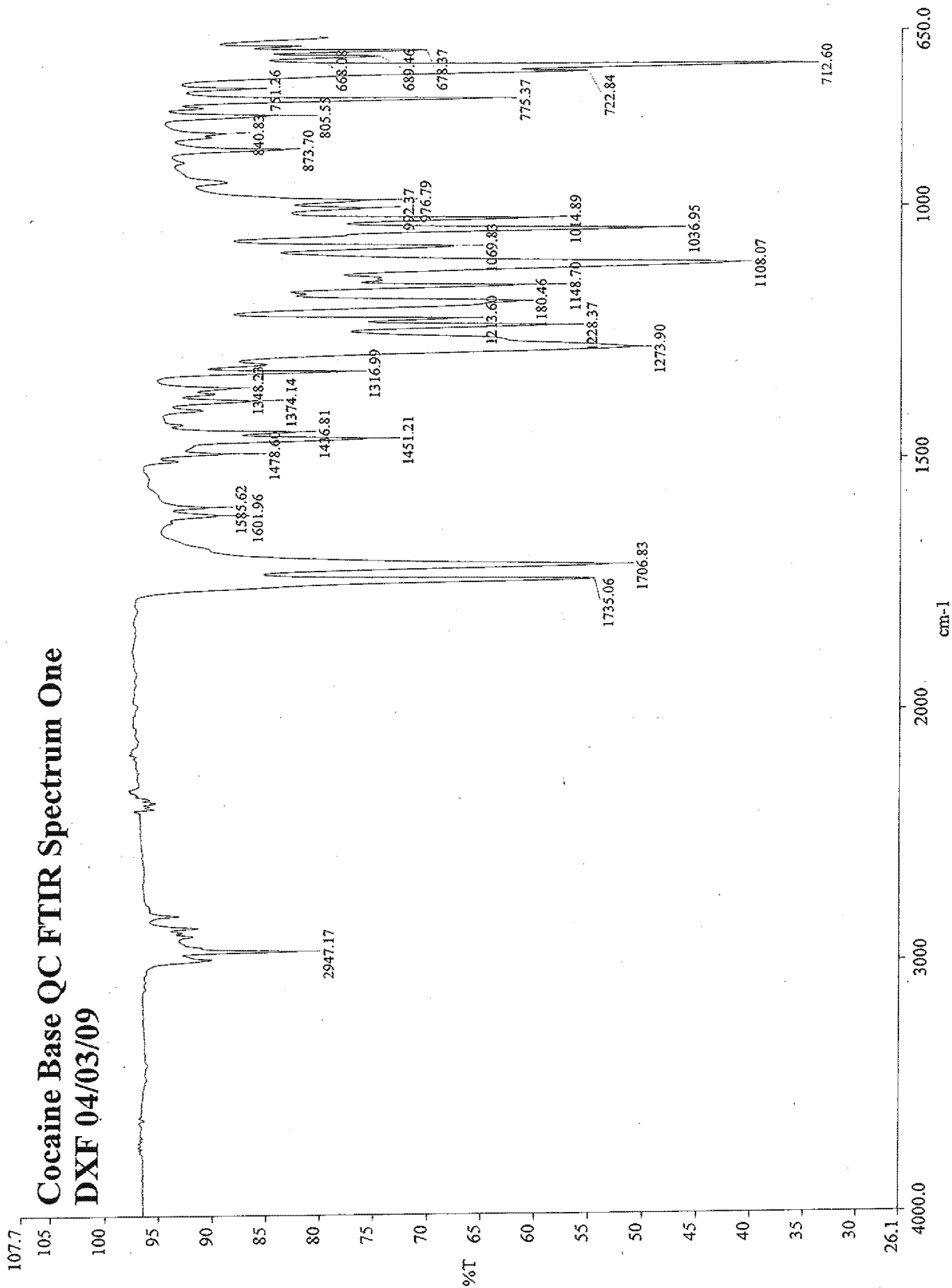
The Georgia State Crime Laboratory



c:\pel_data\spectra\ [redacted]
dl1744.sp - DL1744 COCAINE (SYNTHESIZED CRACK)

Cocaine Base QC FTIR Spectrum One

DXF 04/03/09



c:\pel_data\spectra\cocaine base 04-03-09.sp

Unknown: C:\pel_data\spectra\Cocaine Base 04-03-09.sp

Library: C:\pel_data\libs\DL.idx

Euclidean Hit List:

0.872 DL1744 COCAINE (SYNTHESIZED CRACK)

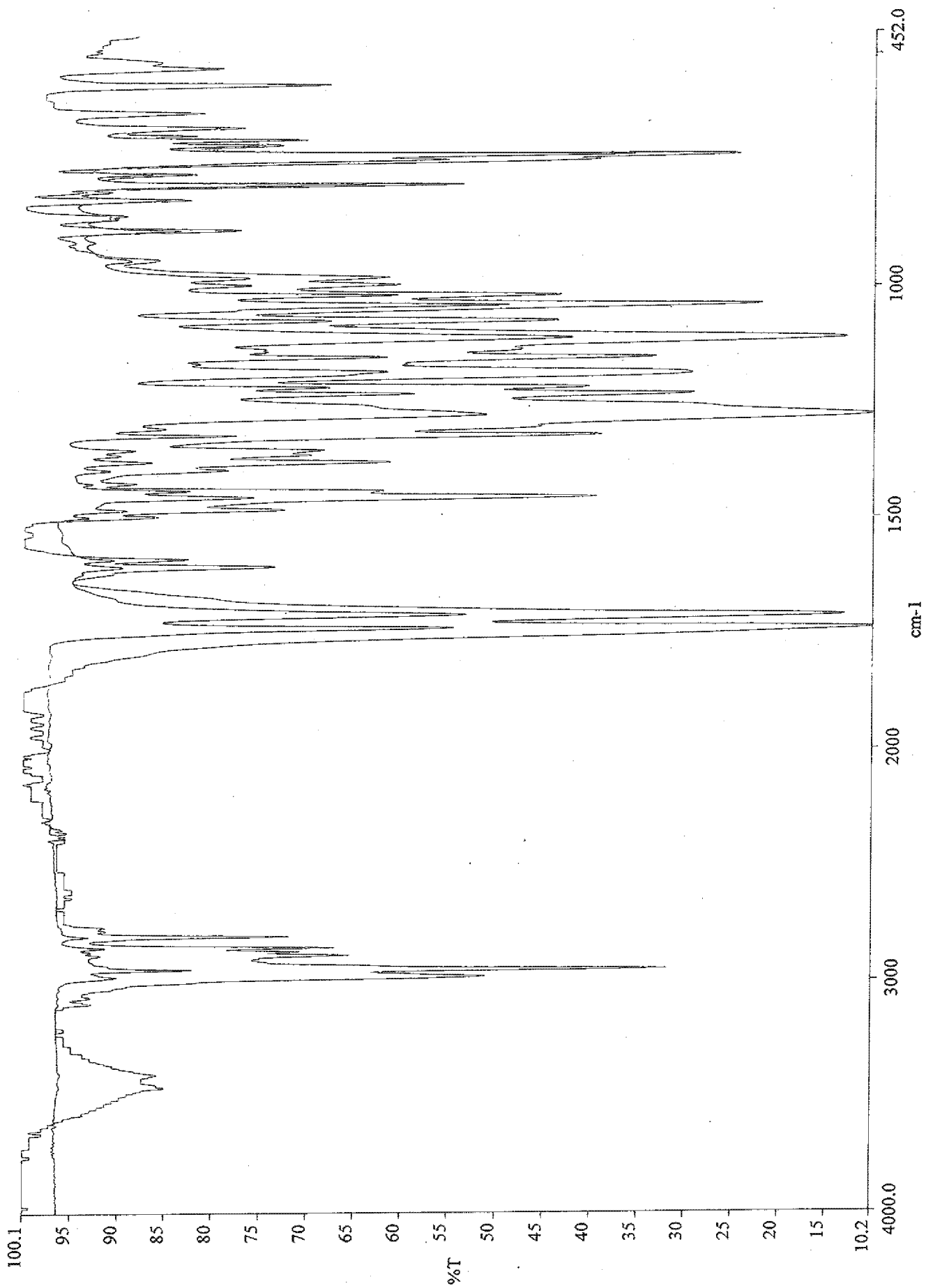
0.839 DL0178 COCAINE IN KBr

0.662 DL0209 COCAINE HCl IN KBr (MERCK)-SAMPLE CONTAINS WATER-METHANOL MIXTURE

Selected Range: 4000.00 - 652.00 cm⁻¹

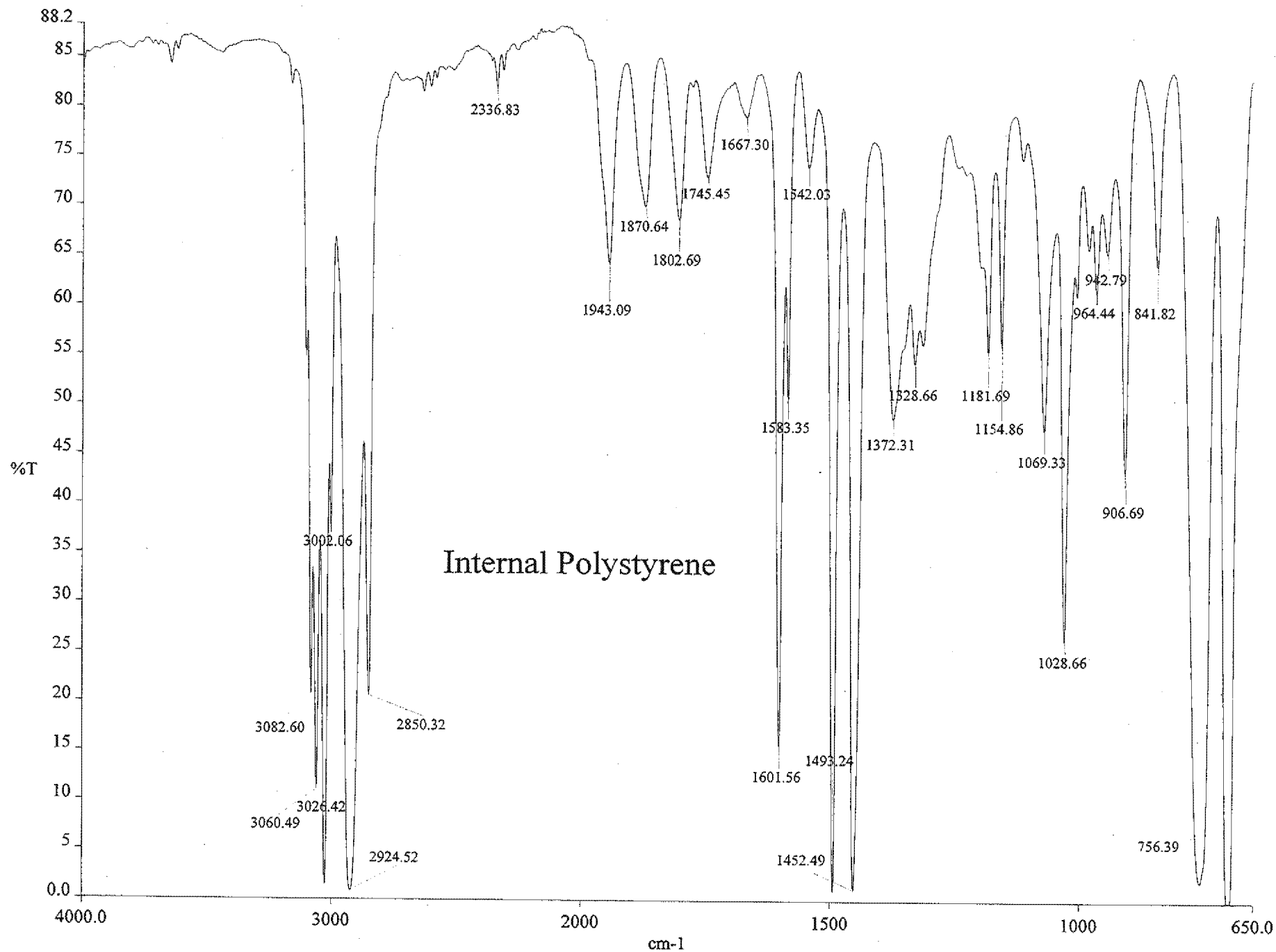
No Blank Regions:

The Georgia State Crime Laboratory



c:\pel_data\spectra\cocaine base 04-03-09.sp

dl1744.sp - DL1744 COCAINE (SYNTHESIZED CRACK)



c:\pel_data\spectra\internal polystyrene 10_01_09.sp

Unknown: C:\pel_data\spectra\Internal Polystyrene 10_01_09.sp

Library: C:\pel_data\libs\DL.idx

Euclidean Hit List:

0.926 DL0526 POLYSTYRENE FILM ON KBr PLATES

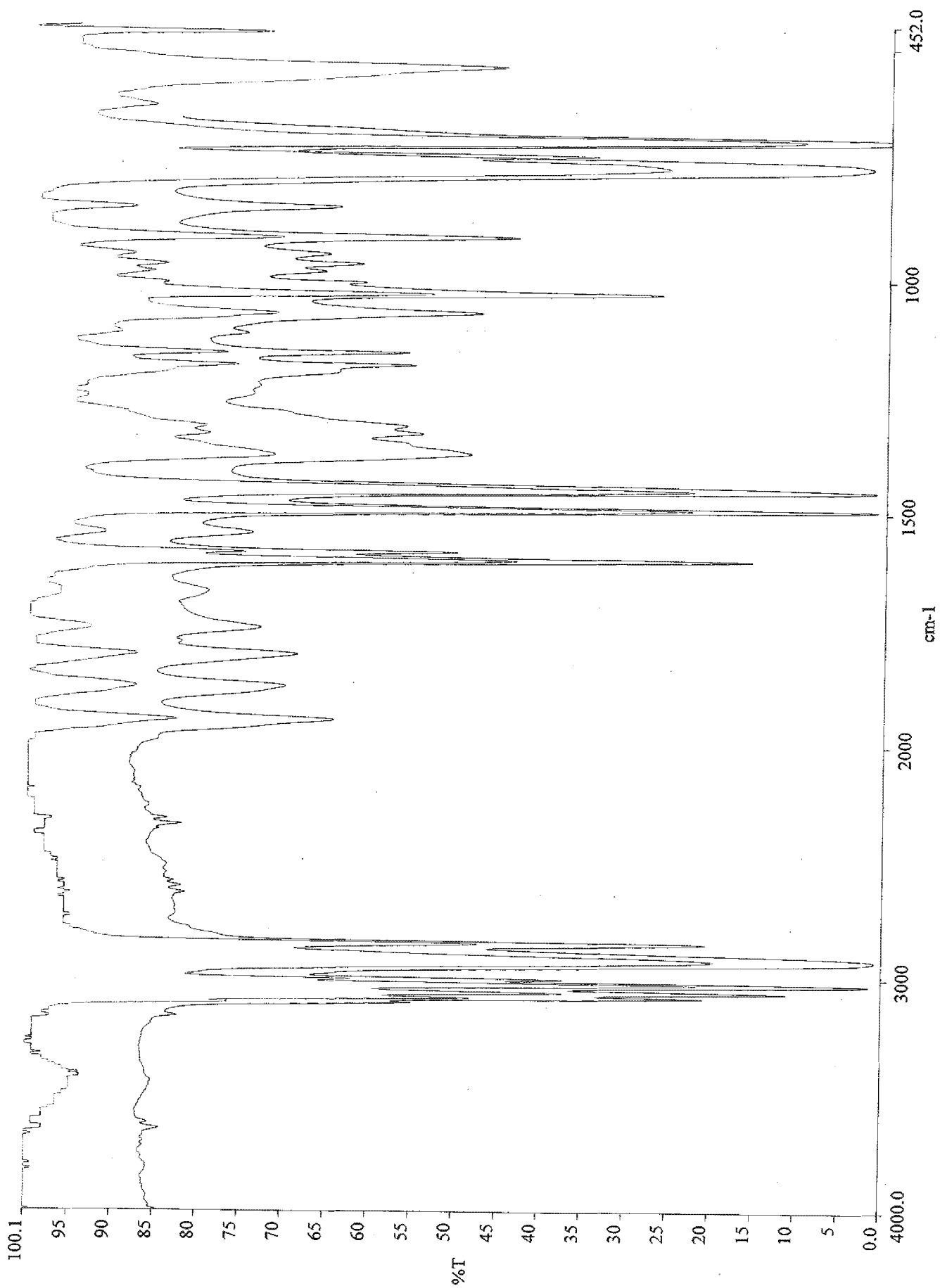
0.652 DL1310 PRENYLAMINE IN KBr-BASIC EXTRACT OF LACTATE SALT

0.579 DL0195 (1-PHENYLCYCLOHEXYL)ETHYLAMINE IN KBr

Selected Range: 4000.00 - 652.00 cm⁻¹

No Blank Regions:

The Georgia State Crime Laboratory



c:\pel_data\spectra\internal polystyrene 10_01_09.sp

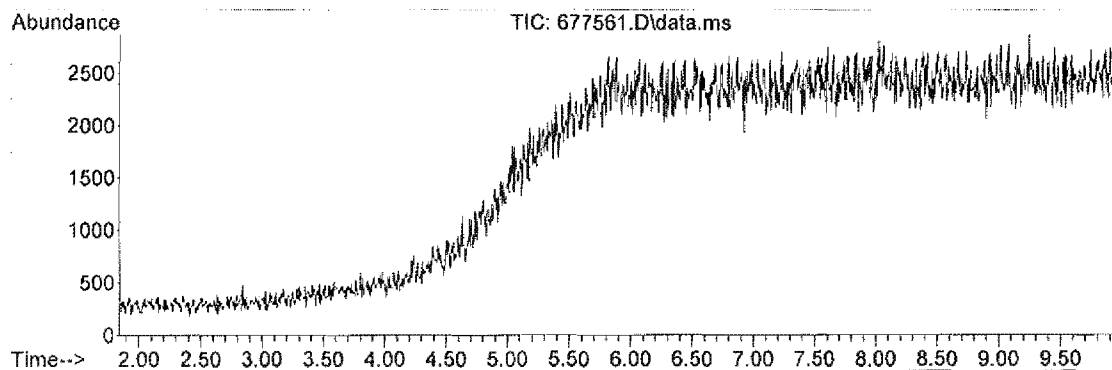
dl0526.sp - DL0526 POLYSTYRENE FILM ON KBr PLATES

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677561.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 8:07
 Sample Name : BLANK
 Submitted by :
 Vial Number : 2
 AcquisitionMeth: DRUGS.M
 Integrator : RTE

✓ ASD
 12-21-11



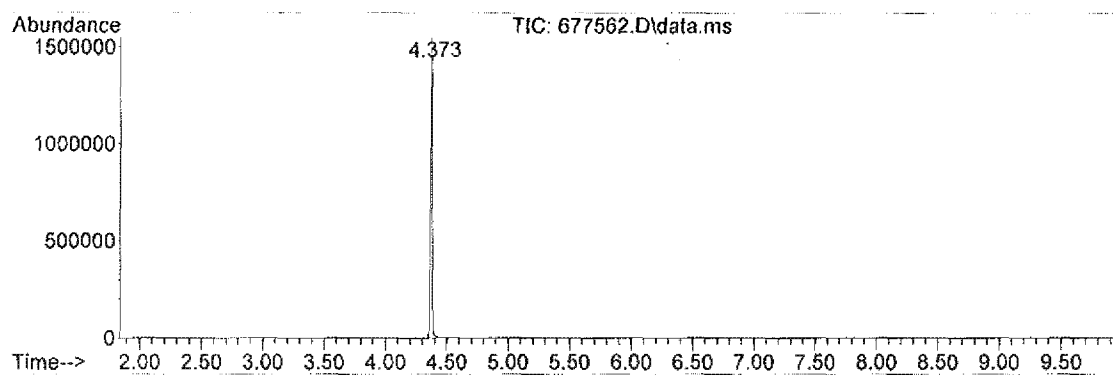
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677562.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 8:20
 Sample Name : COCAINE STD
 Submitted by :
 Vial Number : 62
 AcquisitionMeth: DRUGS.M
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.373	1387600	100.00	100.00

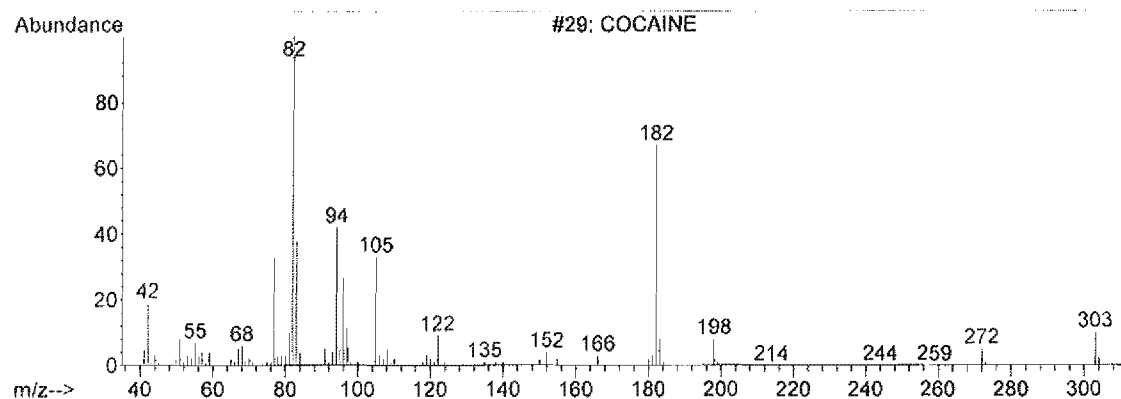
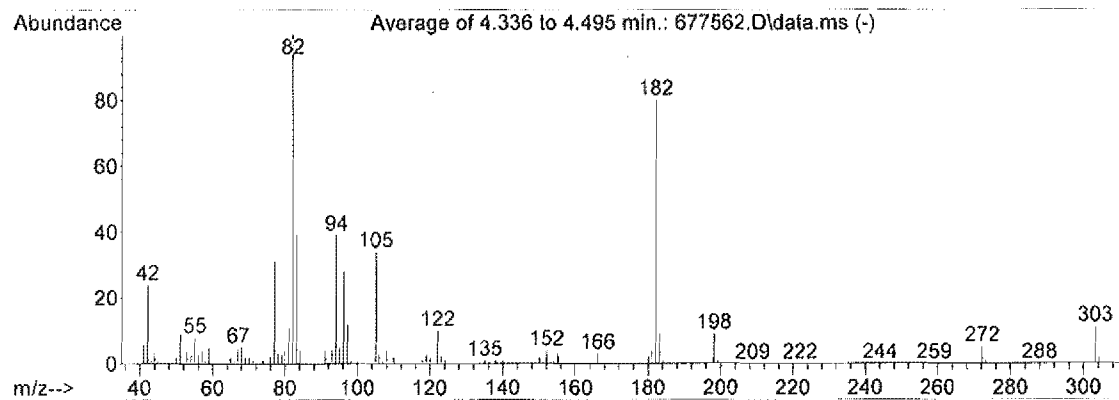
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677562.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 8:20
 Sample Name : COCAINE STD
 Submitted by :
 Vial Number : 62
 AcquisitionMeth: DRUGS.M
 Integrator : RTE

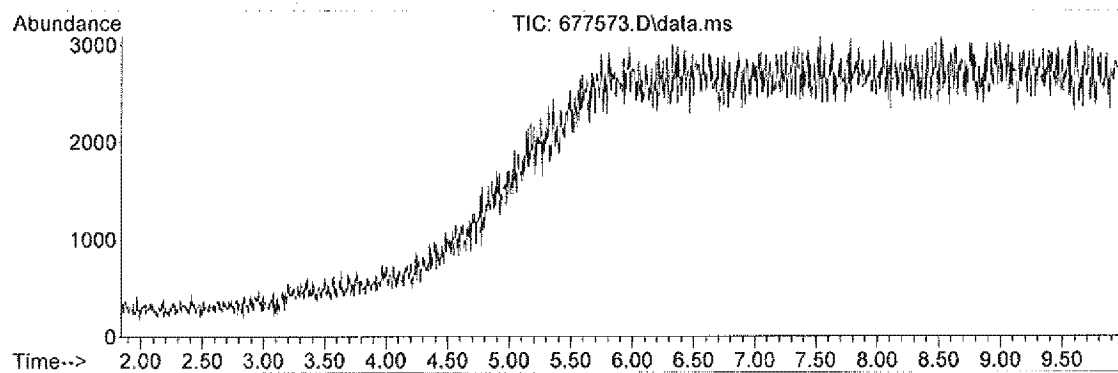
Search Libraries: C:\Database\SLI.L Minimum Quality: 80
 C:\Database\NIST05a.L Minimum Quality: 80
 C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	4.37	C:\Database\SLI.L COCAINE	000050-36-2	99



Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677573.D
Operator : ASD
Date Acquired : 2 Oct 2009 10:39
Sample Name : BLANK
Submitted by : DCS
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



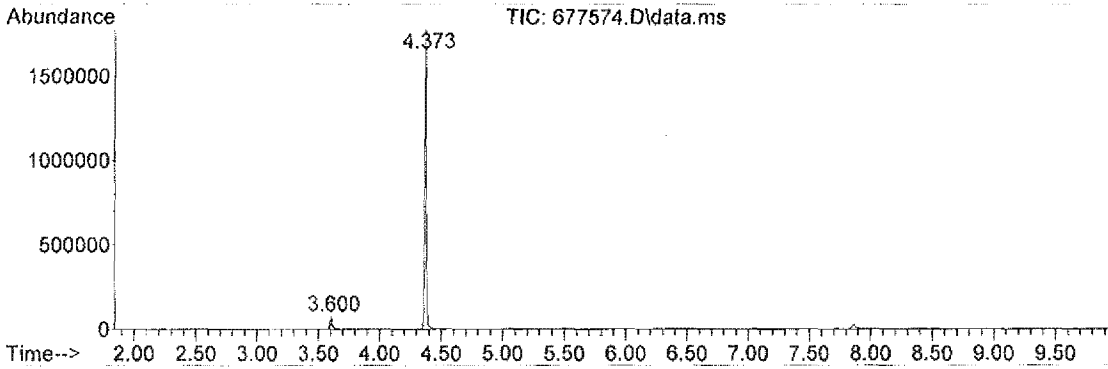
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677574.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 10:51
 Sample Name : XXXXXXXXXX
 Submitted by : DCS
 Vial Number : 74
 AcquisitionMeth: DRUGS.M
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.600	100377	5.66	6.00
4.373	1672665	94.34	100.00

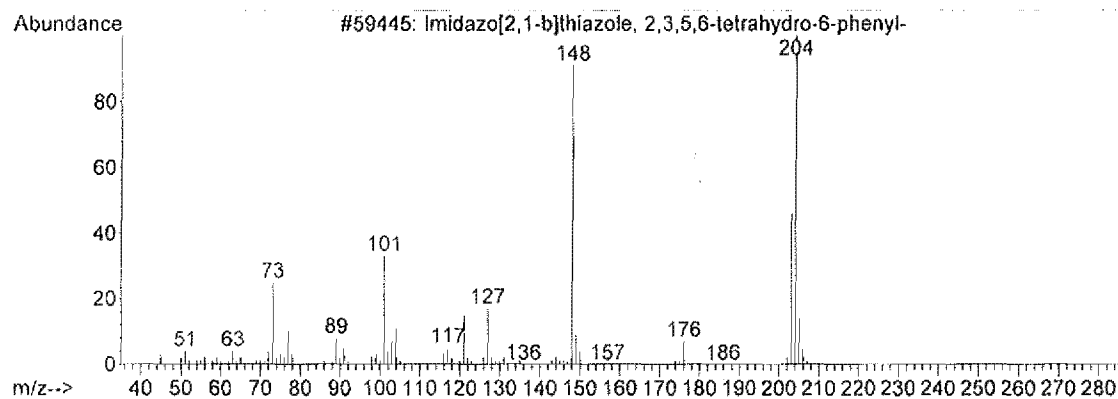
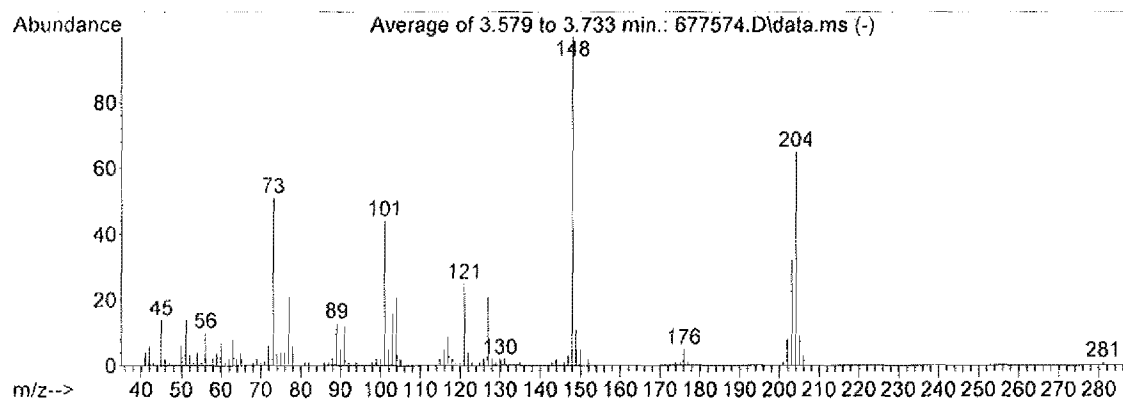
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677574.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 10:51
 Sample Name : XXXXXXXXXX
 Submitted by : DCS
 Vial Number : 74
 AcquisitionMeth: DRUGS.M
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
 C:\Database\NIST05a.L Minimum Quality: 80
 C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.60	C:\Database\NIST05a.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	014769-73-4	97

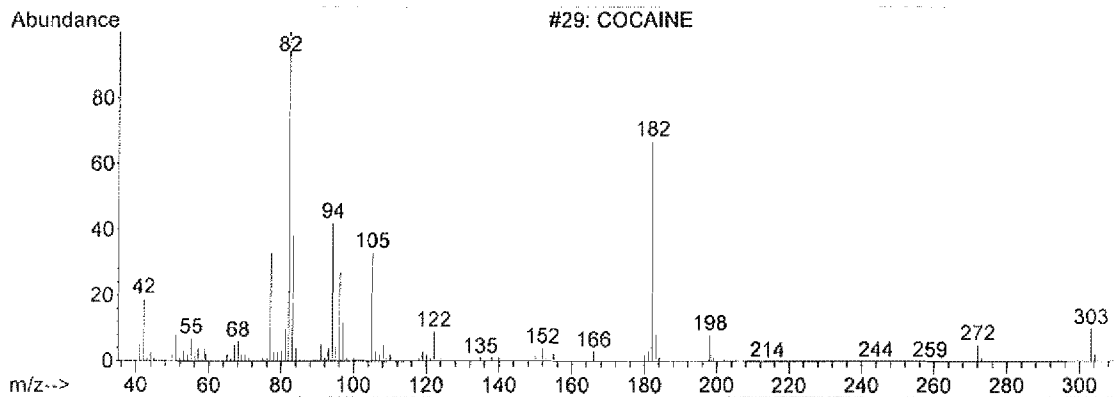
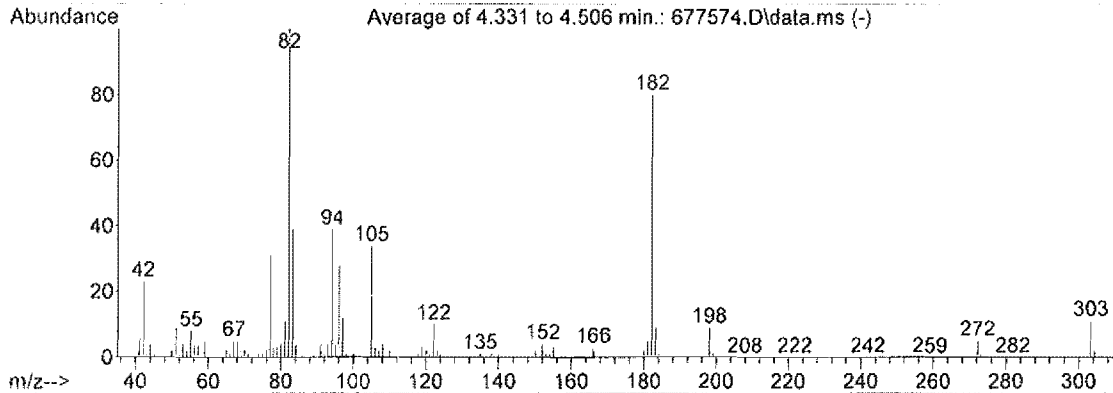


Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677574.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 10:51
 Sample Name : XXXXXXXXXX
 Submitted by : DCS
 Vial Number : 74
 AcquisitionMeth: DRUGS.M
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
 C:\Database\NIST05a.L Minimum Quality: 80
 C:\Database\PMW_TOX2.L

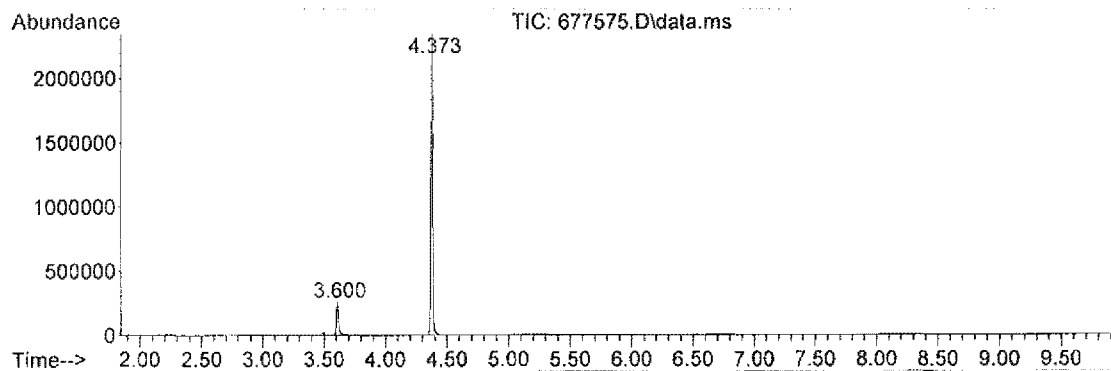
PK#	RT	Library/ID	CAS#	Qual
2	4.37	C:\Database\SLI.L COCAINE	000050-36-2	99



Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677575.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 11:04
 Sample Name : XXXXXXXXXX
 Submitted by : DCS
 Vial Number : 75
 AcquisitionMeth: DRUGS.M
 Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.600	304207	11.87	13.47
4.373	2257593	88.13	100.00

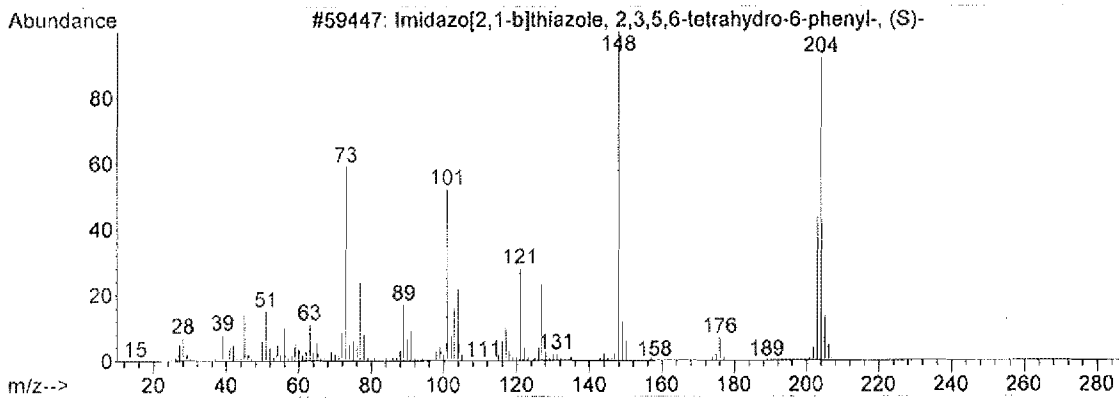
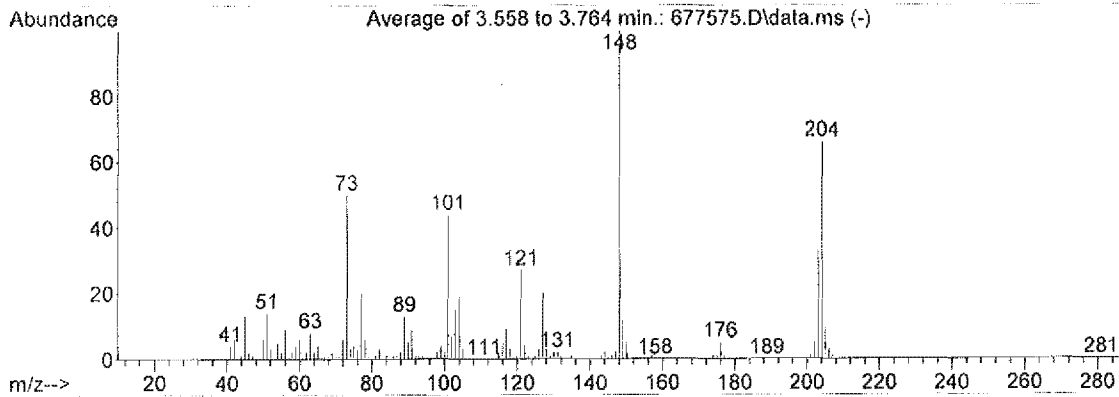
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677575.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 11:04
 Sample Name : XXXXXXXXXX
 Submitted by : DCS
 Vial Number : 75
 AcquisitionMeth: DRUGS.M
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
 C:\Database\NIST05a.L Minimum Quality: 80
 C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	3.60	C:\Database\NIST05a.L		
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	014769-73-4	99
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	98
		Imidazo[2,1-b]thiazole, 2,3,5,6-tet	006649-23-6	97



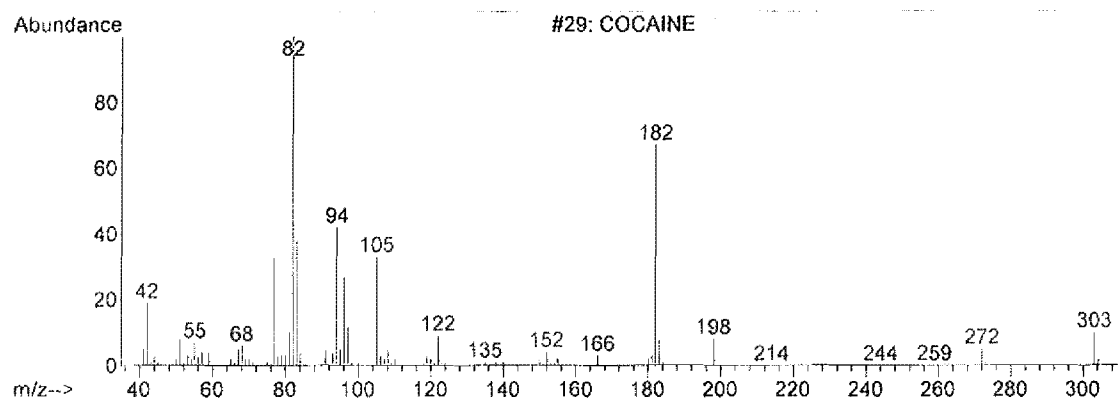
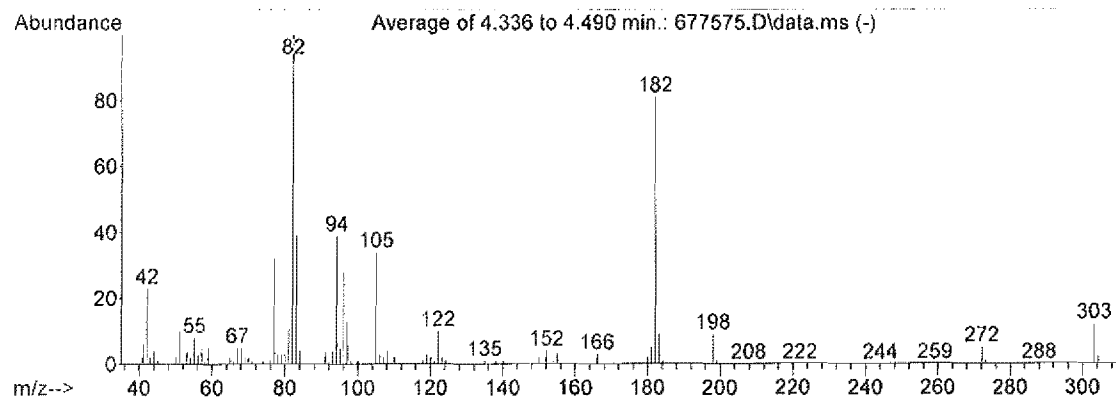
Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677575.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 11:04
 Sample Name : XXXXXXXXXX
 Submitted by : DCS
 Vial Number : 75
 AcquisitionMeth: DRUGS.M
 Integrator : RTE

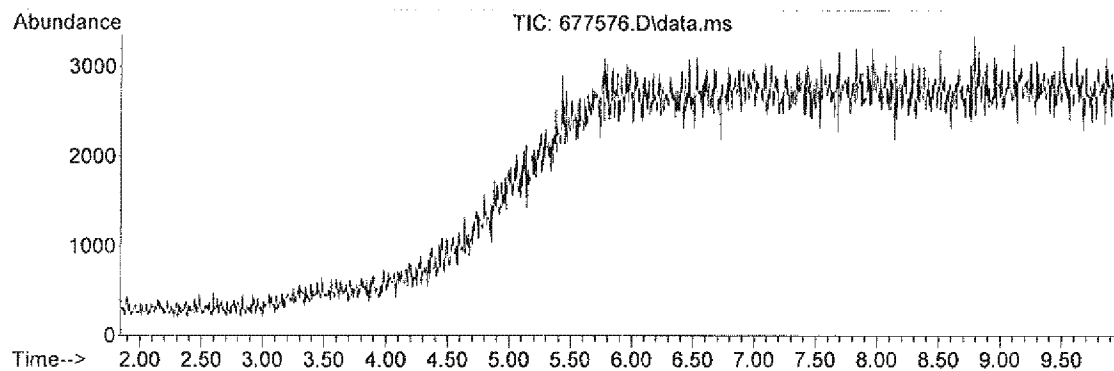
Search Libraries: C:\Database\SLI.L Minimum Quality: 80
 C:\Database\NIST05a.L Minimum Quality: 80
 C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
2	4.37	C:\Database\SLI.L COCAINE	000050-36-2	99



Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677576.D
Operator : ASD
Date Acquired : 2 Oct 2009 11:18
Sample Name : BLANK
Submitted by : DCS
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



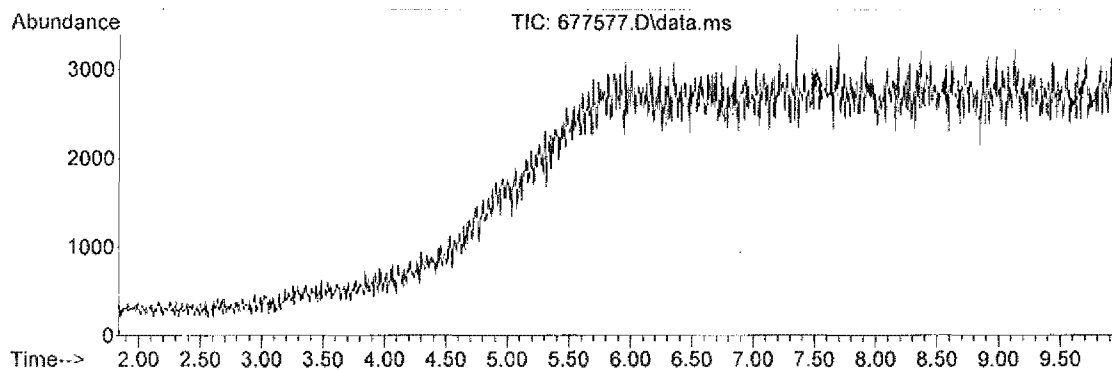
Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677577.D
Operator : ASD
Date Acquired : 2 Oct 2009 11:31
Sample Name : BLANK
Submitted by : DCS
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE

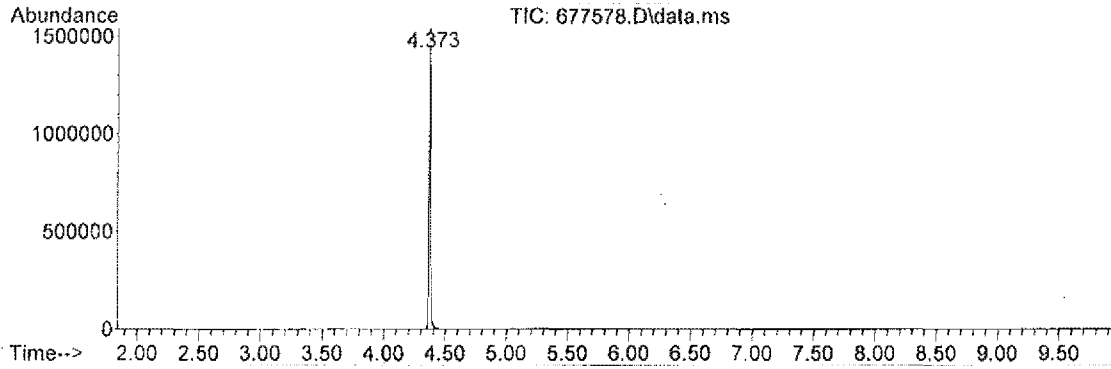


Ret. Time	Area	Area %	Ratio %
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NO INTEGRATED PEAKS

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677578.D
Operator : ASD
Date Acquired : 2 Oct 2009 11:44
Sample Name : COCAINE STD
Submitted by : DCS
Vial Number : 78
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.373	1393262	100.00	100.00

Area Percent / Library Search Report

Information from Data File:

File Name : F:\Q4-2009\SYSTEM7\10_01_09\677578.D
 Operator : ASD
 Date Acquired : 2 Oct 2009 11:44
 Sample Name : COCAINE STD
 Submitted by : DCS
 Vial Number : 78
 AcquisitionMeth: DRUGS.M
 Integrator : RTE

Search Libraries: C:\Database\SLI.L Minimum Quality: 80
 C:\Database\NIST05a.L Minimum Quality: 80
 C:\Database\PMW_TOX2.L

PK#	RT	Library/ID	CAS#	Qual
1	4.37	C:\Database\SLI.L COCAINE	000050-36-2	99

